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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,068	02/19/2004	Richard Alliot	B-5383 621725-7	4542

7590 10/19/2005
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

BUI, HUNG S

ART UNIT PAPER NUMBER

2841

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/782,068	Applicant(s) ALLIROT, RICHARD	
	Examiner Hung S. Bui	Art Unit 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-6 and 9-10 is/are rejected.
- 7) ☒ Claim(s) 2,3,7 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4-6 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishioka (US 6,338,636 B2) in view of Yoshida et al. [US 4,887,188].

Regarding claims 1 and 9-10, Nishioka discloses an I/O expansion system comprising a female connector with housing 1 for operative connection to a baseboard (through terminals 2b) and an add-in card 3 having a male connector 3a on a first edge for receipt by the female connector and a notch 3b for receipt of a retention formation (comprising 8b, 7) of the female connector wherein it further includes a carriage part (comprising 10, 9) movable along the length of the female connector and providing support for the retention formation.

Nishioka disclose the instant claimed invention except for a carriage part moves in a direction substantially perpendicular to the direction of insertion of the male connector in the female connector.

Yoshida et al. disclose an I/O expansion system (figure 2-3a-c) having a carriage part moving in a direction substantially perpendicular to the direction of insertion of a device (2) in a socket of the connector.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the carriage design of Yoshida et al., for the I/O expansion system of Nishioka, for the purpose of securing/retaining the card in a socket.

Regarding claim 4, Nishioka further discloses the retention formation being pivotable between an operative position in which the retention formation is within the notch on the add-in card and acts to retain the add-in card in the female connector and an inoperative position in which the retention formation is free of the notch on the add-in card and the add-in card can be removed from the female connector and wherein it further includes an arm 7 connected with the retention formation for pivoting of the retention formation between operative and inoperative positions.

Regarding claim 5, Nishioka disclose the instant claimed invention except for the specific shape of the retention.

Yoshida et al. disclose the retention being a hook shaped (33a, figure 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the hook retention of Yoshida et al. with the I/O expansion system of Nishioka, for the purpose of strengthening the retention.

Regarding claim 6, Nishioka discloses the carriage part including an upwardly extending arm 9, and the retention formation is an inwardly extending protrusion from the upwardly extending arm and wherein the upwardly extending arm is resiliently deformable and the retention formation has a cam surface (tip of 8b) on its upper side such that when the add-in card is inserted into the female connector the upwardly

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extending arm bends outwardly to permit the retention formation to ride over a leading edge of the notch and then into the notch to retain the add-in card in the female connector.

Allowable Subject Matter

3. Claims 2-3 and 7-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not disclose a carriage pad as recited in claim 2.

Response to Arguments

4. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Shipe et al. [US 6,655,976] disclose an electrical connector;
- Moore et al. [US 5,812,370] disclose media eject mechanism;
- Noble [US 6,358,079] discloses a printed circuit card retention mechanism;
- Daskalakis et al. [US 6,361,343] disclose a circuit card retention mechanism;

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- Flingchbaugh et al. [US 5,468,156] disclose locking system for interconnection of daughter board and motherboard assemblies;
- Wang [US 6,368,124] discloses a card edge connector with daughter board retainer;
- Ling et al. [US 2004/0121644] disclose an integrated add in card retention mechanism; and
- Shipe et al. [US 6,824,413] disclose an electrical connector with retention mechanism.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

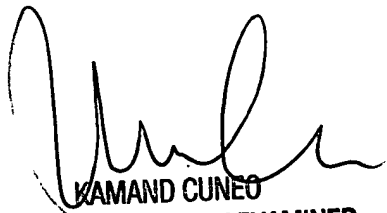
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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10/12/05
Hung Bui
Art Unit 2841


KAMAND CUNEO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800